Texas State Soil and Water Conservation Board
Clean Water Act §319(h) Nonpoint Source Grant Program
FY2011 Workplan 11-03

SUMMARY PAGE						
Title of Project	LCRA Creekside Conservation and Land Stewardship Program					
Project Goals	To protect the Texas Lower Colorado River watershed by providing education, technical assistance, and financial incentives to landowners through LCRA's Creekside Conservation Program. Assess nonpoint source (NPS) pollutant load reductions resulting from the program as well as educate agricultural producers and local stakeholders on abatement of NPS pollution through implementation of conservation practices and promotion of Water Quality Management Plans (WQMPs). All of these objectives will be achieved through collaboration with the TSSWCB, local soil and water conservation districts, the USDA Natural Resources Conservation Service, the USDA Agricultural Research Service and others.					
Project Tasks	(1) Project Administration; (2) Creekside Conservation Program Implementation; (3)Evaluation of Conservation Practice Implementation through the Creekside Conservation Program; (4) Technology Transfer					
Measures of Success	• Demonstrate significant implementation of conservation practices on agricultural operations through the implementation of a minimum of 18 conservation plans. • Work with private landowners to implement conservation management plans on at least 10,000 acres throughout the project region. • Achieve the following estimated pollutant load reductions: 16,000 tons sediment, 92,750 pounds nitrogen, and 18,193 pounds phosphorus					
Project Type	Implementation (X); Education (X); Planning ( ); Assessment ( ); Groundwater ( )					
Status of Waterbody on *2008 Texas Water Quality Inventory and 303(d) List*	Segment ID		Parameter		Category	
	1401 Colorado River Tidal		bacteria		5a	
	1402C Buckners Creek		dissolved oxygen		5c	
	1402H Skull Creek		dissolved oxygen		5b	
	1416 San Saba River		bacteria		5c	
	1416A Brady Creek		dissolved oxygen		5c	
	1428 Colorado River below Town Lake		bacteria		5c	
	1428C Gilleland Creek		bacteria		4a (2010 IR)	
Project Location (Statewide or Watershed and County)	Colorado River Basin in Bastrop, Blanco, Burnet, Colorado, Fayette, Lampasas, Llano, Matagorda, San Saba, Travis and Wharton counties					
Key Project Activities	Hire Staff ( ); Surface Water Quality Monitoring ( ); Technical Assistance (X); Education (X); Implementation (X); BMP Effectiveness Monitoring ( ); Demonstration (X); Planning ( ); Modeling ( ); Bacterial Source Tracking ( ); Other ( )					
Texas NPS Management Program Elements	• Elements 1 and 2 • LTGs 1, 2, and 6 • STGs 2A, 2B, 3B, 3C, 3D, and 3F					
Project Costs	Federal	$387,240	Non-Federal	$405,000	Total	$792,240
Project Management	• Lower Colorado River Authority (LCRA)					
Project Period	November 1, 2011 – October 31, 2015					

Part I – Applicant Information

Applicant							
Project Lead	Bobby Humphrey						
Title	Natural Resource Conservation Coordinator II						
Organization	Lower Colorado River Authority						
E-mail Address	Bobby.humphrey@lcra.org						
Street Address	3700 Lake Austin Blvd or PO Box 220						
City	Austin	County	Travis	State	TX	Zip Code	78767
Telephone Number	800-776-5272 ext. 3356			Fax Number	830-693-6242		

Project Partners	
Names	Roles & Responsibilities
Texas State Soil and Water Conservation Board (TSSWCB)	Provide state oversight and management of all project activities and ensure coordination of activities with related projects.
Lower Colorado River Authority (LCRA)	Provide overall project management. Responsible for project coordination, submission of quarterly and final reports, technology transfer, and evaluation of program effectiveness.
Bastrop, Caldwell-Travis, Colorado, Fayette, Hill Country, Llano, Matagorda, Pedernales, San Saba, Wharton and Taylor Soil and Water Conservation Districts (SWCDs)	Assist with project coordination, technology transfer, notification of the availability of technical and financial assistance, and private landowner cooperation in installation of conservation practices.
USDA Natural Resources Conservation Service (NRCS)	Take the lead in the development of applicant pool. Develop conservation plans and follow-up activities.
USDA Agricultural Research Service (ARS)	Play advisory role in tasks that involve assessment of program effectiveness, i.e. determining sediment load reduction.

Part II – Project Information

Project Type								
Surface Water	X	Groundwater						
Does the project implement recommendations made in (a) a completed WPP, (b) an adopted TMDL, (c) an approved I-Plan, or (d) a Comprehensive Conservation and Management Plan developed under CWA §320?				Yes	X	No		
If yes, identify the document.	Implementation Plan for One Total Maximum Daily Load for Bacteria in Gilleland Creek							
If yes, identify the agency/group that developed and/or approved the document.	Texas Commission on Environmental Quality in cooperation with the Lower Colorado River Authority.			Year Approved	2011			

Watershed Information

Watershed Name(s)	Hydrologic Unit Code (8 Digit)	Segment ID		305(b) Category	Size (Acres)
Project will cover the Lower Colorado River watershed area of LCRA's ten statutory counties and Lampasas County.	12090109	1416	San Saba River	5c	Colorado River Watershed in the ten county LCRA statutory district is 4,233,897 acres. Colorado River Watershed in Lampasas County is 93,928 acres. Total Acreage: 4,233,897 + 93,928 4,327,825
	12090109	1416A	Brady Creek	5c	
	12090201	1405	Lake Marble Falls		
	12090201	1406	Lake LBJ	5c	
	12090201	1407	Inks Lake		
	12090201	1408	Lake Buchanan		
	12090201	1409	Colorado River above Lake Buchanan		
	12090203	1415	Llano River		
	12090205	1403	Lake Austin	4a	
	12090205	1404	Lake Travis		
	12090205	1427	Onion Creek		
	12090205	1428	Colorado River below Town Lake	5c	
	12090205	1429	Town Lake		
	12090205	1428C	Gilleland Creek	4a	
	12090206	1414	Pedernales River		
	12090301	1434	Colorado River above LaGrange		
	12090302	1401	Colorado River Tidal	5a	
	12090302	1402	Colorado River below LaGrange		
	12090301	1402C	Buckners Creek	5c	
	12090302	1402H	Skull Creek	5b	

Water Quality Impairment

Describe all known causes (pollutants of concern) of water quality impairments or concerns from any of the following sources: *2008 Texas Water Quality Inventory and 303(d) List* draft *2010 Texas Integrated Report*, Clean Rivers Program Basin Summary/Highlights Reports or other documented sources.

Segment ID		Parameter
1401	Colorado River Tidal	Bacteria-5a
1416	San Saba River	Bacteria-5c
1428	Colorado River below Town Lake	Bacteria-5c
1402H	Skull Creek	Dissolved Oxygen-5b
1402C	Buckners Creek	Dissolved Oxygen-5c
1416A	Brady Creek	Dissolved Oxygen-5c
1428C	Gilleland Creek	Bacteria-4a

Project Narrative

Problem/Need Statement

NPS pollution has traditionally been considered one of the greatest threats to the Lower Colorado River watershed. As farmers and ranchers lose topsoil to erosion, waterways can suffer from sedimentation. This sediment can build up causing not only blockage of the main waterways, but also lead to depressed oxygen levels, threatened aquatic habitats and overall impaired water quality.

Through proper land management and implementation of conservation practices, water quality can be improved tremendously. Historically, many of these conservation practices have been cost prohibitive for landowners to implement. Similarly, education and outreach has not been provided in order to instill the land stewardship ethic that is needed.

The implementation practices in this project are intended to specifically address, water quality and aquatic habitat concerns by reducing sedimentation and agricultural NPS pollution. Accordingly, these practices will benefit the entire watershed. In much of the project area, new landowners are purchasing larger parcels for the first time. There continues to be a great need for education and outreach to insure that these "non-traditional" landowners carry forth a sound land stewardship ethic.

Project Narrative

General Project Description (Include Project Location Map)

Background

The LCRA is a conservation and reclamation district created by the Texas Legislature in 1934. The State of Texas gives LCRA responsibility for protecting the waters of the lower Colorado River basin. LCRA manages water supplies for cities, farmers and industries along a 600-mile stretch of the Texas Colorado River between San Saba County and the Gulf Coast.

LCRA operates six dams on the Colorado River that form the Highland Lakes: Buchanan, Inks, LBJ, Marble Falls, Travis and Lake Austin. Downstream of the Highland Lakes, the Colorado River winds through several counties and eventually feeds into Matagorda Bay.

LCRA regulates water discharges to manage floods, and releases water for sale to municipal, agricultural and industrial users. It works with communities to plan and coordinate their water and wastewater needs. LCRA also operates an environmental laboratory and monitors the water quality of the lower Colorado River. It enforces ordinances that control illegal dumps, regulates on-site sewage facilities, and reduces the impact of NPS pollution from major new construction along and near the lakes.

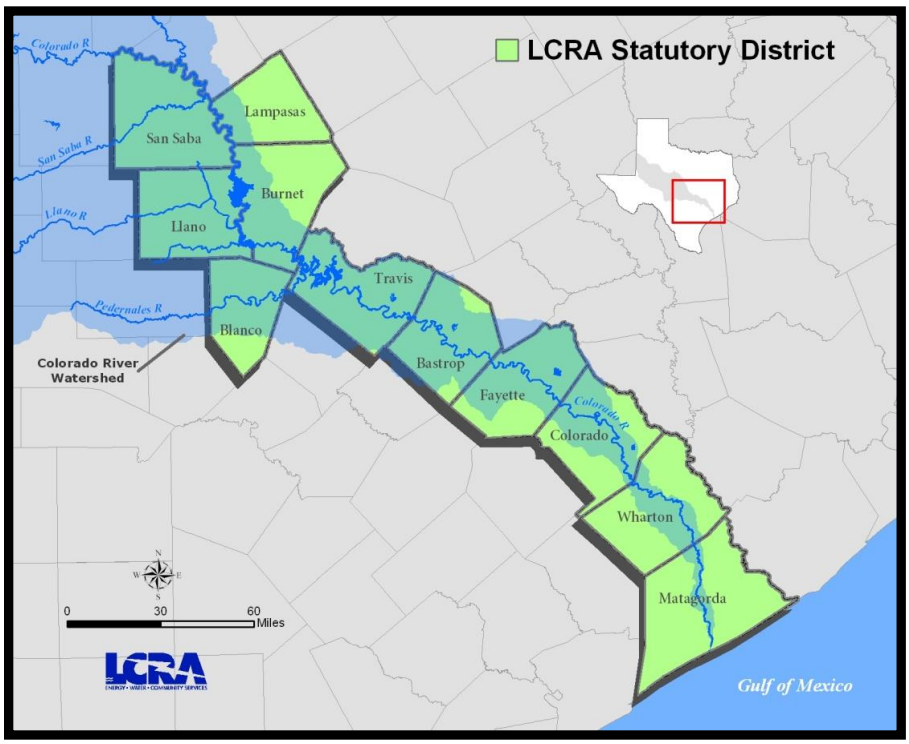
LCRA Creekside Program History and Purpose

A 1990 Colorado River Sediment Reduction Study conducted by the LCRA and NRCS determined that reducing suspended sediment caused by soil erosion and stormwater runoff could be a cost-effective way to lengthen the lives of the Highland Lakes of Central Texas and protect aquatic resources by improving water quality.

As a result of this study, LCRA began the Creekside Conservation Program, a partnership among private landowners, NRCS, local SWCDs, and LCRA to help participating landowners reduce agricultural NPS pollution. This partnership promotes local control of the program through conservation priorities set by the SWCD. The program promotes a "win/win". The participating landowners win by making their lands more productive and the environment wins due to enhanced water quality.

The program provides financial incentives for projects that help conserve soil and water on privately owned land within the watershed of LCRA's statutory district and Lampasas County. Eligible counties include Bastrop, Blanco, Burnet,

Colorado, Fayette, Lampasas, Llano, Matagorda, San Saba, Travis, and Wharton Counties.



Since its inception, the program has helped 212 landowners develop and complete management plans on over 99,000 acres of private land. LCRA and participating landowners have a combined investment of about $2.4 million in the completion of these projects. While financial incentives are provided for the acreage upon which BMPs are directly applied (treatment acres), management plans are written to encompass the entire land unit (management acres), thus facilitating a holistic approach to soil and water conservation.

Partnerships in Conservation

The success of this program is not only measured in the number of project participants, but also by the willingness of other agencies to work with LCRA in its implementation. The Creekside Conservation Program operates on a cost-share basis, where the private landowner provides at least 50% of project costs, and LCRA provides reimbursement for up to 50% of project cost. In 2004 and 2007, LCRA received separate Clean Water Act §319(h) NPS grants totaling more than $965,000 from the TSSWCB and the U.S. Environmental Protection Agency (EPA) (project 04-05 entitled "Creekside Conservation Program Project" and project 07-05 entitled "LCRA Soil and Water Stewardship Program"). LCRA also found a new partner in conservation when the Texas Parks and Wildlife Foundation formed a conservation alliance with the Wal-Mart Foundation and created the Water for Texas Initiative. In 2009, this initiative provided an additional $60,000 to augment the Creekside Conservation Program, thus allowing LCRA to work with more landowners. It is this pooling of resources that allows more landowners the opportunity to participate and contribute to the common cause of soil and water conservation.

Water Quality Management Plans

A water quality management plan (WQMP) is a site-specific plan developed through and approved by SWCDs for agricultural or silvicultural lands. The plan includes appropriate land treatment practices, production practices, management measures, technologies or combinations thereof. The purpose of a WQMP is to achieve a level of pollution prevention or abatement determined by the TSSWCB, in consultation with SWCDs, to be consistent with state water quality standards.

Through the Creekside Conservation Program, LCRA regularly partners with local SWCDs and NRCS. One goal of this project will be to promote, advise, and recommend WQMPs to landowners throughout the project area.

Tasks, Objectives and Schedules						
Task 1	Project Administration					
Costs	Federal	$102,080	Non-Federal	$0	Total	$102,080
Objective	To effectively administer, coordinate and monitor all work performed under this project including technical and financial supervision and preparation of status reports.					
Subtask 1.1	LCRA will prepare electronic quarterly progress reports (QPRs) for submission to the TSSWCB. QPRs shall document all activities performed within a quarter and shall be submitted by the 15th of January, April, July and October. QPRs shall be distributed to all project partners.					
	Start Date	Month 1	Completion Date	Month 48		
Subtask 1.2	LCRA will perform accounting functions for project funds and will submit appropriate Reimbursement Forms to TSSWCB at least quarterly.					
	Start Date	Month 1	Completion Date	Month 48		
Subtask 1.3	LCRA will participate in meetings as appropriate in order to efficiently and effectively achieve project goals, coordinate efforts and summarize activities and achievements made throughout the course of this project. LCRA will host coordination conference calls, at least quarterly, with TSSWCB to discuss project activities, project schedule, communication needs, deliverables, and other requirements.					
	Start Date	Month 1	Completion Date	Month 48		
Subtask 1.4	LCRA will develop a final report.					
	Start Date	Month 34	Completion Date	Month 48		
Deliverables	• Quarterly progress reports in electronic format • Reimbursement Forms and necessary documentation in hard copy format • Final Report in electronic and hard copy formats					

<table>
<tr><th colspan="8">Tasks, Objectives and Schedules</th></tr>
<tr><td>Task 2</td><td colspan="7">Creekside Conservation Program Implementation</td></tr>
<tr><td>Costs</td><td>Federal</td><td>$263,360</td><td>Non-Federal</td><td>$405,000</td><td>Total</td><td colspan="2">$668,360</td></tr>
<tr><td>Objective</td><td colspan="7">To provide financial incentives and technical assistance to landowners in the development and implementation of conservation plans that help reduce NPS pollution and sediment loads on agricultural operations in the ten county statutory district and Lampasas County, and to coordinate project efforts with natural resource agencies and project participants.</td></tr>
<tr><td rowspan="2">Subtask 2.1</td><td colspan="7">Participating SWCDs and NRCS, with assistance from LCRA will solicit participation and develop conservation plans for eligible landowners. A minimum of 18 conservation plans will be developed under this project in the Colorado River basin in LCRA’s ten county statutory district and Lampasas County. This minimum is based on the total budgeted amount of financial incentives. SWCDs, NRCS, and LCRA will strive to develop additional conservation plans beyond the minimum.</td></tr>
<tr><td>Start Date</td><td colspan="2">Month 1</td><td>Completion Date</td><td colspan="3">Month 48</td></tr>
<tr><td rowspan="2">Subtask 2.2</td><td colspan="7">Participating SWCDs and NRCS, with assistance from LCRA, will assist eligible landowners in the Colorado River basin in LCRA’s ten county statutory district and Lampasas County in applying for and obtaining financial incentives to aid in implementation of BMPs prescribed in conservation plans developed through subtask 2.1. This project provides $270,000 in CWA §319(h) funding as financial incentives. Landowners shall be eligible to receive a maximum amount of $15,000 from the TSSWCB CWA §319(h) funds. The maximum rate shall not exceed 40% of the cost of implementation of the BMPs. The remaining 60% will be provided by LCRA (10%) and the landowner (50%). Financial incentives will be based on actual cost not to exceed average cost of the practice.

Practices that achieve sediment, nitrogen, and phosphorus reductions on rangeland, pastureland, and cropland that are eligible for financial incentives include:
• Brush management (314)
• Contour buffer strips (332)
• Critical area planting (342)
• Diversion (362)
• Field border (386)
• Riparian herbaceous cover (390) – for practice establishment only
• Filter strip (393)
• Grade stabilization structure (410)
• Grassed waterway (412)
• Terrace (600)
• Water and sediment control basin (638)
• Range Planting (550)
• Herbaceous Weed Control (315) –mowing/shredding for practice establishment only
• Watering Facility (614) – for livestock only
• Pond (378) –associated with 614 only
• Fence (382)
• Nutrient Management (590) – for establishment of 332, 550, 390, 412, 386, 393, or 342 only
• Pumping Plants (533) – associated with 614 only
• Pipelines (516) – associated with 614 only
• Wells (642) – associated with 614 only</td></tr>
<tr><td>Start Date</td><td colspan="2">Month 1</td><td>Completion Date</td><td colspan="3">Month 48</td></tr>
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<tr><td>Subtask 2.3</td><td colspan="4">SWCDs, NRCS, and LCRA will prioritize conservation plan development and financial incentive applications consistent with the priority areas identified below:
<u>Priority Area 1</u>
Projects located within LCRA’s ten county statutory district and Lampasas County that are directly along or adjacent to waterbodies listed in the “Water Quality Impairment” section.
<u>Priority Area 2</u>
Projects within the watershed boundaries of Priority Area 1, but not directly adjacent to the impaired waterbodies, will be considered only after Priority Area 1 projects have been funded.
<u>Priority Area 3</u>
Projects not in Priority Area 1 or 2 but directly along or adjacent to the Colorado River or tributaries of the Colorado River, and within LCRA’s ten county statutory district and Lampasas County will be considered only after all Priority Area 1 and 2 projects have been funded.
<u>Priority Area 4</u>
Projects not in Priority Area 1, 2 or 3 but located within the Colorado River watershed of LCRA’s ten county statutory district and Lampasas County will be considered only after all higher priority projects have been funded.</td></tr>
<tr><td></td><td>Start Date</td><td>Month 1</td><td>Completion Date</td><td>Month 48</td></tr>
<tr><td>Subtask 2.4</td><td colspan="4">Participating SWCDs and NRCS, with assistance from LCRA will track the location and types of conservation practices on each participant’s land, and provide follow-up technical assistance throughout the duration of the project. NRCS will provide technical services to LCRA as part of a reimbursable agreement shared between these agencies. Technical services will include initial field work, design of comprehensive plans of operation for each project participant, and follow-up certification of project completion.</td></tr>
<tr><td></td><td>Start Date</td><td>Month 1</td><td>Completion Date</td><td>Month 48</td></tr>
<tr><td>Deliverables</td><td colspan="4">• Final report that includes a map, list of conservation plans and practices implemented, before-and-after photos of representative BMPs implemented, and photos of field days</td></tr>
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Tasks, Objectives and Schedules						
Task 3	Evaluation of Conservation Practice Implementation through the Creekside Conservation Program					
Costs	Federal	$15,000	Non-Federal	$0	Total	$15,000
Objective	Work with the NRCS and ARS to estimate nutrient and sediment load reductions resulting from implementation of conservation practices through the Creekside Conservation Program.					
Subtask 3.1	LCRA will utilize the Texas Best Management Practice Evaluation Tool (TBET) to estimate nutrient and sediment reductions and best management practice effectiveness from implementation of conservation practices through the Creekside Conservation Program.					
	Start Date	Month 1	Completion Date	Month 48		
Subtask 3.2	LCRA will examine historical water quality monitoring data and current monitoring regimes (sites, frequency, parameters) in the basin in relation to Creekside Conservation Program implementation locations. LCRA will assess data gaps in historical monitoring data and current monitoring regimes in relation to evaluating in-streams water quality improvements from the implementation of conservation practices through the Creekside Conservation Program. LCRA will consider this data gap analysis when setting annual priorities for Clean Rivers Program coordinated monitoring and when seeking additional CWA §319(h) funds for the Creekside Conservation Program.					
	Start Date	Month 1	Completion Date	Month 48		
Subtask 3.3	LCRA will develop (Months 1-12) and distribute (Months 13-24) a survey to historic/current Creekside Conservation Program participating landowners in order to evaluate the level of conservation practices being maintained.					
	Start Date	Month 1	Completion Date	Month 48		
Deliverables	• Program evaluation (pollutant load reductions and survey results) included in final report • Data gap report on monitoring data/regimes and historic Program implementation					

Tasks, Objectives and Schedules						
Task 4	Technology Transfer					
Costs	Federal	$6,800	Non-Federal	$0	Total	$6,800
Objective	To provide informational and educational materials to landowners regarding the effectiveness of the Creekside Conservation Program. The project activities will directly involve landowners through implementation of conservation practices and offer educational outreach to the general public.					
Subtask 4.1	LCRA will give presentations to SWCDs, producers, landowners, and civic groups in the ten county statutory district and Lampasas County. Presentations will focus on BMPs that meet local resource concerns and improve water quality. These presentations will assist in future initiation of WQMPs at the local level (2 per year x 3 years = 6 presentations). Any publications (i.e. news articles, local media interviews, etc.) about the Creekside Conservation Program will be collected and posted to the LCRA website.					
	Start Date	Month 1	Completion Date	Month 48		
Subtask 4.2	LCRA will coordinate and participate in field days and workshops at selected project sites. There will be a minimum of 2 field days annually for the life of the project (2 field days x 3 years = 6 field days total). The actual dates will be determined as the project progresses.					
	Start Date	Month 1	Completion Date	Month 48		
Deliverables	• Documentation of the success of each program presentation through: the number of attendees (sign in list), copy of agenda or meeting highlights • Newspaper articles and local media interviews posted to LCRA website • Execution of 6 field days					

Project Goals (Expand from Summary Page)

To protect the Texas Lower Colorado River watershed, which is performed by providing education, technical assistance, and financial incentives to landowners through LCRA's Creekside Conservation Program. Conservation BMP implementation is a key project goal which is achieved through partnerships with other agencies, such as the NRCS and ARS. LCRA will assess NPS pollution reductions resulting from the Creekside Conservation Program with technical assistance from NRCS and ARS. WQMPs are also emphasized through the program as good tools for watershed management along with the implementation of conservation practices.

Education and technology transfer are also a major component to this project. Educational activities such as field days and workshops will be offered to landowners and the general public in the Texas Lower Colorado River watershed. Technology transfer will also be achieved through demonstration and/or public display of ongoing projects. A "conservation partner" gate sign will be given to each project participant for public display.

Measures of Success (Expand from Summary Page)

(1) Demonstrate significant implementation of conservation practices on agricultural operations through the implementation of a minimum of 18 conservation plans.
(2) Work with private landowners to implement conservation management plans on at least 10,000 acres throughout the project region. While financial incentives are provided for the acreage upon which BMPs are directly applied (treatment acres), management plans are written to encompass the entire land unit (management acres), thus facilitating a holistic approach to soil and water conservation.
(3) Achieve the following estimated pollutant load reductions: 16,000 tons sediment, 92,750 pounds nitrogen, and 18,193 pounds phosphorus.

***2005 Texas Nonpoint Source Management Program* Reference (Expand from Summary Page)**

Goals and/or Milestone(s)

Element One – Explicit short- and long-term goals, objectives and strategies that protect surface and ground water.

Long-Term Goal – Objective 1 – Focus NPS abatement efforts, implementation strategies, and available resources in watersheds identified as impacted by NPS pollution.

Long-Term Goal – Objective 2 – Support the implementation of state, regional, and local programs to prevent NPS pollution through assessment, implementation, and education.

Long-Term Goal – Objective 6 – Increase overall public awareness of NPS issues and prevention activities.

Short-Term Goal Two – Implementation – Objective A – Work with regional and local entities to determine priority areas and develop and implement strategies to address NPS pollution in those areas.

Short-Term Goal Two – Implementation – Objective B – Develop and implement BMPs to address constituents of concern or waterbodies not meeting water quality standards in watersheds identified as impacted by NPS pollution.

Short-Term Goal Three – Education – Objective B – Administer programs to educate citizens about water quality and their potential role in causing NPS pollution.

Short-Term Goal Three – Education – Objective C –Where applicable, expedite development of technology transfer activities to be conducted upon completion of BMP implementation.

Short-Term Goal Three – Education – Objective D – Conduct outreach…to facilitate broader participation and partnerships. Enable stakeholders and the public to participate in decision-making and provide a more complete understanding of water quality issues and how they relate to each citizen.

Short-Term Goal Three – Education – Objective F –Implement public outreach and education to maintain and restore water quality in waterbodies impacted by NPS pollution.

Element Two – Working partnerships and linkages to appropriate state, regional, and local entities, private sector groups, and federal agencies.

Estimated Load Reductions Expected (Only applicable to implementation projects)

Estimated load reductions expected from implementing BMPs through this project are based on 1) reported Creekside Conservation Program load reductions achieved historically (sediment), and 2) TSSWCB's use of TBET to calculate load reductions achieved (nitrogen and phosphorus) from WQMPs certified in FY2011 in the agency's Wharton and Dublin regional service areas. The estimated pollutant load reductions resulting from implementation of conservation practices on a goal of 10,000 acres across the project area are 16,000 tons of sediment, 92,750 lbs of nitrogen, and 18,193 lbs of phosphorus.

Sediment – The Final Report for TSSWCB project 04-05 *Creekside Conservation Program Project* indicates an average sediment load reduction of approximately 1.6 tons/acre was achieved through implementation of BMPs, based on the Rangeland Hydrology Erosion Model (RHEM) considered at the time of preparing the report to be the best science available for such estimate. When the original 04-05 workplan was submitted, sediment reduction estimates were based on RUSLE2; guidance from the USDA Agricultural Research Service proved this estimate to be grossly inaccurate. Therefore, estimated sediment load reductions expected from implementing BMPs through this project are based on using this 1.6 tons/acre average on a goal of 10,000 acres.

Nitrogen and Phosphorus – Beginning in FY2011, TSSWCB began utilizing TBET to estimate nutrient and sediment reductions and BMP effectiveness for the agency's WQMP Program. TBET is a simplified and customized user-interface for the Soil and Water Assessment Tool (SWAT), which predicts pollutant losses from fields under a variety of management scenarios and conservation practices. Although SWAT is generally used as a basin-scale model, its basic structure and development originated from the EPIC field-scale model; therefore, SWAT can and will continue to be suitable for field-scale modeling. TBET accounts for local climate, soils, topography, and management scenarios for conditions across Texas. As an interface, TBET acts as an input and output interpreter for SWAT and insulates the user from the model complexities. By using the process-based SWAT model, TBET more accurately simulates a wide variety of management options and field characteristics than existing alternatives such as the Spreadsheet Tool for Estimating Pollutant Loads (STEPL). To estimate nutrient load reductions expected from implementing BMPs through this project, load reductions achieved (nitrogen and phosphorus) from WQMPs certified in FY2011 in the agency's Wharton and Dublin regional service areas are used (these agency service areas overlap LCRA's statutory district and Lampasas County). TBET results indicate an average nitrogen load reduction of approximately 9.275 lbs/acre and an average phosphorus load reduction of approximately 1.819 lbs/acre were achieved. Therefore, estimated nutrient load reductions expected from implementing BMPs through this project are based on using these averages on a goal of 10,000 acres.

Participation in the Creekside Conservation Program by individual landowners is voluntary. This decision to participate is based on a number of factors, including the landowner's ability to provide the match (50% in this project). Adoption of BMPs by producers is highly dependent on the success or failure of outreach and education initiatives and social marketing campaigns. Effectiveness of particular BMPs in reducing pollutants is dependent on a myriad of factors including natural weather phenomena and the ability of producers to correctly install, operate, maintain or manage the BMP. With these factors accounted for, the estimated load reductions to be expected, as presented above, should be regarded as the "best case scenario" with probability that actual load reductions will be less.

The mechanism for reporting pollutant load reductions achieved through implementation of BMPs funded with CWA §319(h) monies, is through the EPA Grants Reporting and Tracking System (GRTS). Actual load reductions achieved can only be reported after the BMPs are installed and operational. Currently, EPA Program Activity Measures (PAMs) only call for load reductions achieved for nitrogen, phosphorus, and sediment. Nitrogen, phosphorus, and sediment load reductions achieved through this project will be reported through GRTS by TSSWCB.

Part III – Financial Information

Budget Summary			
Federal	$ 387,240	% of total project	48.9%
Non-Federal	$ 405,000	% of total project (≥ 40%)	51.1%
Total	$ 792,240	Total	100.0%

Category	Federal	Non-Federal	Total
Personnel	$ 79,750	$ 0	$ 79,750
Fringe Benefits	$ 22,330	$ 0	$ 22,330
Travel	$ 3,600	$ 0	$ 3,600
Equipment	$ 0	$ 0	$ 0
Supplies	$ 600	$ 0	$ 600
Contractual	$ 15,000	$ 0	$ 15,000
Construction	$ 263,360	$ 405,000	$ 668,360
Other	$ 2,600	$ 0	$ 2,600
Total Direct Costs	$ 387,240	$ 405,000	$ 792,240
Indirect Costs (≤ 15%)	$ 0	$ 0	$ 0
Total Project Costs	$ 387,240	$ 405,000	$ 792,240

The TSSWCB CWA §319(h) NPS Grant Program has a 60/40% match requirement. The cooperating entity will be reimbursed 60% from federal funds and must contribute a minimum of 40% of the total costs to conduct the project. The 40% match must be from non-federal sources and should be described in the budget justification. Reimbursable indirect costs are limited to no more than 15% of total federal direct costs. The project budget generally covers a three year period.

Budget Justification (Federal)		
Category	Total Amount	Justification
Personnel	$ 79,750	50% Salary for 1 project coordinator for 48 months = $79,750
Fringe Benefits	$ 22,230	$79,750 x 28% for fringe = $22,230
Travel	$ 3,600	2 LCRA Project Coordinators: 1,200 miles/year x 2 people = 2,400 miles/year x 3 years = 7,200 miles x 50 cents per mile = $3,600
Equipment	$ 0	N/A
Supplies	$ 600	General office supplies, batteries, etc. $200/year x 3 years = $600
Contractual	$ 15,000	Technical service provided by USDA NRCS and USDA ARS for Tasks 2 and 3.
Construction	$ 263,360	Financial Incentives not to exceed 40% of cost for implementing BMPs on conservation plans maximum of $15,000
Other	$ 2,600	Postage ($100), media releases ($100), conservation gate signs ($1,400), rangeland/pasture sticks ($500), and printing services ($500)
Indirect	$ 0	N/A

Budget Justification (Non-Federal)		
Category	Total Amount	Justification
Personnel	$ 0	N/A
Fringe Benefits	$ 0	N/A
Travel	$ 0	N/A
Equipment	$ 0	N/A
Supplies	$ 0	N/A
Contractual	$ 0	N/A
Construction	$ 405,000	• Landowner match for 50% of cost for implementing BMPs on conservation plans ($337,500 total) • LCRA match to landowners for 10% of cost for implementing BMPs on conservation plans ($67,500 total)
Other	$ 0	N/A
Indirect	$ 0	N/A